DOCUMENT RESUME

ED 335 797 EA 023 296

AUTHOR Calhoun, Emily F.
TITLE A Wide-Angle Lens: How To Increase the Variety, Collection, and Use of Data for School Improvement.
PUB DATE Apr 91
NOTE 32p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, April 3-7, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Action Research; Data Collection; *Educational Assessment; *Educational Improvement; Educational Planning; Elementary Secondary Education; *Evaluation Utilization; Program Evaluation; *Self Evaluation (Groups)

ABSTRACT

The progress made by 24 League of Professional Schools in increasing the variety, collection, and use of data during 1990-91 is examined in this paper. Three goals of the league are to involve schools in action research for school improvement, increase teacher participation through shared governance, and develop school improvement initiatives. Methodology involved analysis of the 24 schools' action plans, 2 planning surveys, and conference discussions. Findings indicate that participating school teams need information about assessment devices--particularly availability and procedures--and formulation of specific assessment goals. Confrontation with data initiates action for change, often producing beneficial outcomes. Four tables and two figures are included. (18 references) (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED335797

A WIDE-ANGLE LENS: HOW TO INCREASE THE VARIETY, COLLECTION, AND USE OF DATA FOR SCHOOL IMPROVEMENT

Emily F. Calhoun
PSI League of Professional Schools
University Of Georgia

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
E. Calhoun
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper Presented at the Annual Meeting of the
America Educational Research Association

Chicago, Illinois

April 6, 1991

Confrontation with data that has been identified by school faculty as value indicators of student life or of their life in the school community can support the unfreezing of the status quo necessary for major school changes. Repeated confrontation in the action research cycle with data transformed into information, fed into the decision-making and action-taking cycle, and then used to monitor the results of action taken, can support the moving and refreezing necessary to new directions and behaviors. Data collection and use, then, can serve as the gate from which collective actions for improvement emerge.

When conducting action research, school faculties engage in the collection and analysis of data to help select and clarify goals, select procedures, and study progress in terms of effects on students, teachers, administrators, and parents and other community members. One of the three major goals of the PSI League of Professional Schools is to involve schools in action research as part of the school-improvement process. The other two goals of the League are establishment of teacher involvement in schoolwide instructional decisions through a shared governance process and the development of school-improvement initiatives, especially ones focused on instruction.

To study and evaluate goals is a published premise of the League itself and of each League school. As part of their application for membership in the League, twenty-four schools signed a commitment to collect data to assess their progress on instructional initiatives. The premise is that developing accurate assessment of

EA 023 296

BEST COPY AVAILABLE

collectively established goals pushes a school faculty to conceptualize what is worth accomplishing through curriculum, staff development, or instruction. Continuing study of the behavior, attitudes, and knowledge desired by the school community can clarify emerging goals and help shape plans toward optimum possibilities for school improvement.

Another operational premise of the League stresses the value of having all actors in the school community (parents, students, teachers, administrators, and central office) engaged in information seeking and empirical problem solving aimed at making their world -- from student life at the classroom table, to classroom instruction, to the school schedule -- a healthier place, socially, intellectually, and physically. The value of modeling lifelong learning and problem solving in the professional environment in which one has chosen to live supports personal, professional growth (Dewey, 1904; Gardner, 1963; O'Houle, 1980; and Schon, 1983) and provides continuous demonstrations of these critical life processes for students. Or, simply stated, actions speak louder than words, what we do carries more weight than what we say, what are the real "basics" educators wish to convey, or as Schaefer (1967) stated:

> How to induce more children to grapple zestfully with academic issues may elude our most determined efforts. But I strongly suspect that observing adults honestly wrestling with intellectual problems might win more youngsters to the life of the mind than any other experience the schools could devise. (p. 77)

Data Use and Action Research

Brief History of Action Research

Data use within the League of Professional Schools matches an action-research-for-social-change framework. The origin of action research is usually attributed to Kurt Lewin (1947, 1948) and his students (e.g. Lippitt) although Corey (1953) divides the honor between Lewin and John Collier. Collier was commissioner of Indian Affairs from 1933 to 1945; he felt that administrators and layman should participate in research , impelled "from their own areas of need because the problems are theirs and they must live with them" (Collier, 1945, in Corey, p. 7). Lewin's integration of action-taking into experimental social science

research was published in 1946 in "Action Research and Minority Problems" and in 1947 in "Group Decision and Social Change." Both articles define action research as a three-step spiral process of 1) planning which involves "reconnaissance or fact-finding"; 2) taking actions; and 3) fact-finding about the results of the action (Lewin, 1947). "Planning usually starts with something like a general idea. For one reason or another it seems desirable to reach a certain objective. Exactly how to circumscribe this objective and how to reach it is frequently not too clear." Thus, we reach intuitively toward general goals and means and gradually progress toward a plan specific enough to act on.

Lewin (1947) believed that social problems should be served by social inquiry. His action research approach that applied the methodology of social science to immediate practical major problems developed out of his work to improve intergroup relations, such as reducing anti-Semitism and racial prejudice. Lewin challenged the compartmentalization of research from action and the separation of research personnel from active players. He advocated including practitioners from the arena under investigation in all phases of the research. He also challenged practitioners to use the tools of the social scientist to bring about change: "It seems to be crucial for the progress of social science that the practitioner understand that through social sciences and only through them can he gain the power necessary to do a good job" (Lewin, 1948, p. 213).

Lewin and others who developed the action research concept emphasized collective rather than individualistic problem-solving and study. Thus, action researchers study problems which grow out of the community, work within a group to determine actions to be taken, and evaluate the effect of these actions within the community setting. Lewin advocated group work as part of the action research process because of the power of group discussion and interaction in producing commitment and because of the support for changes in individual attitudes and behavior provided by group interaction (1947). Chein, Cook, and Harding (1948) recommended practitioner involvement to build awareness of the need for the actions taken and greater personal investment in making the actions work.

Corey (1953) was one of the first to officially promote action research in the field of education. His definition of action research was the "process by which practitioners' attempt to study their problems scientifically in order to guide, correct, and evaluate their decisions and actions" (p. 6). His thesis was that school practitioners would make better decisions and implement more effective practices if

they conducted research as part of their decision-making process and used the results of such research as a guide to selection or modification of their practice. The value of action research for Corey was "determined by the extent to which findings lead to improvement in the practices of the people engaged in the research" (p.13). Through involving teachers, administrators, and supervisors in studying their work (teaching) and in applying these findings to their school setting, changes would be more likely to occur.

Because of its emphasis on individual interactions within a group setting to support changes in behavior, its cycles of fact-finding to feed decision making and to revise/evaluate actions, its use for large scale social problems - and school change requires resocialization, its bent beyond acquisition of knowledge toward action steps within the context studied, and its opportunities for all actors within the school community to be engaged in group investigation and active problem solving to generate a better learning/living environment, action research has potential as one of the tools to be used in school improvement. This approach applied to data collection and use of site-specific information is particularly compatible with school improvement through shared governance because shared governance requires group decision-making and uses collective action to bring about change in practice. Another operational premise of the League is that the group dynamics involved in schoolwide data collection, analysis, and use will serve to support change at the micro-level within the school and provide additional support for change at the macro-level within and throughout the League.

The concepts of teacher-research and action-research for individual investigation of problems are completely compatible with this approach. However, the focus of action research as promoted through League meetings and support services emphasizes collective study of the school by its community of inhabitants. Each school creates its distinctive structure that involves various groups to different extents in particular activities. The range of persons involved is determined by the school. Thus, as we will see in the following pages, teachers, administrators, parents, other community members, students, and support staff all may be involved, but the extent of participation varies by site.

Action Research For School Improvement

> "Data of varying quality are plentiful.
> Understanding is rare."
> (Alvin Toffler, Powershift, 1990, p. 289.)

Action research or data use to guide action is conceptually simple; it sounds, looks, and feels much like slightly formalized problem solving, which it is. Regular application of this approach as a normal way of doing business, in making the school a center of inquiry, however, is difficult to accomplish, (Sirotnik, 1987). Whether in schools (Goodlad, 1984) or in business and industry (Lippitt et al., 1985), answers to "what has been accomplished through the changes implemented?" are not readily available to most stakeholders. Lippitt cites two surveys that address the lack of evaluation in planned organizational change in business and industry. Of 160 published reports of change interventions examined by Porras and Berg, only 20 included evaluation components to assess organizational or work group changes. It is interesting to examine the reasons. In a survey of 76 consultants and clients, Bidwell and Lippitt (1971) found four major factors cited as obstacles to evaluation: lack of time, lack of criteria or a frame of reference, inability to develop measurable objectives, and lack of money. What is of interest to us is that these four factors are similar to the ones mentioned by League teams in relation to assessment of progress on their initiatives, especially time, criteria, and how do we measure "it."

Lewin's work in the 1940's with a variety of organizations, from single schools to minority organizations to labor and management representatives has remarkable relevance today:

> Two basic facts emerged from these contacts: there exists a great amount of good-will, of readiness to face the problem squarely and really do something about it... [Yet] These eager people, feel themselves to be in the fog. They feel in the fog on three counts: 1. What is the present situation? 2. What are the dangers? 3. And most important of all, what shall we do? (1948, p.201)

Lewin considered the lack of clarity about what ought to be done as one of the greatest obstacles to improvement of intergroup relations. He felt that one of the consequences of this unclearness was the lack of standards by which to measure progress:

> In a field that lacks objective standards of achievement, no learning can take place. If we cannot judge whether an action has led forward or backward, if we have no criteria for evaluating the relation between effort and achievement, there is nothing to prevent us from making the wrong conclusions and to encourage the wrong work habits. Realistic fact-finding and evaluation is a prerequisite for any learning (Lewin, 1948, p. 202).

Lewin also identified another "severe effect" of the inability to determine the relationship between efforts made and achievement. This failure to measure the effects of actions designed to lead to improved conditions within an organization deprives workers [teachers, administrators, general educators, and students] "of their legitimate desire for satisfaction on a realistic basis." Because descriptive fact-finding about educational innovations, regardless of simplicity, complexity, cost in money or time –from adopting a new handwriting program, to use of manipulatives K-8 for mathematics, to adopting a literature based approach to language arts,to block-schedules in the middle and high schools, to mainstreaming of students, etc.–is not an integral operating behavior in most school cultures, satisfaction or dissatisfaction with achievement relative to an innovation remains personalized and is mainly a matter of individual "temperament." Professional satisfaction for members of a dynamic organization requires collective acceptance of the continous cycle of 1) measuring progress and 2) taking action. As long as the determinination of success or failure of an innovation, even if it was originally selected by a team or a school council or the entire faculty, is left solely to the educators as individuals, collective action for school improvement or "site-based, collaborative school improvement" will be impossible.

As school teams struggle to determine how they will measure their school improvement goals, both the goals and the routes or actions to take in achieving them should become clearer. Effective schools demonstrate improved achievement over time and regularly collect and use data to assess student performance (Glickman, 1990, p. 253). Yet, the action research process of identifying problem areas and ideas worth pursuing, gathering relevant data, discussing these data, formulating solutions, determining actions, and assessing the effects of these actions is a capacity "lacking in most schools" (Goodlad, 1984, p. 276). Fortunately, schools in the United States exist in a national culture that has long revered a pragmatic, problem solving approach to social action. Because of the support for this approach to change in the macro-system, the capacity for action research for school improvement could be rapidly developed within schools.

Action Research within the League of Professional Schools

Through League activities, school teams are encouraged to develop the school as a center of inquiry: to apply group investigation procedures as a way of life. The formal collection of data, followed by group analysis and interpretation, may move the school community forward in the path it has elected to follow. This regular confrontation with data as a progress marker can function as "choice points" for the organization, as both "noticing choice" and "doing choice." Paraphrasing Weick on the role of choice in the organizing process, the school community can ask itself "Knowing what we know now, should we notice something we did not notice before and ignore something we noticed before?" and "Knowing what we know now, should we act differently?" From baseline data to regular checks on progress, educators face a series of choice points for unfreezing action and changing the experience of schooling.

Shared governance for its value in using the collective wisdom resident on-site in any school and the collective energy and resocialization needed to bring about major school change; the emphasis on instruction for enhanced education because "teaching" is the major work of the school; and the drive for action research in order to know the current status of progress on goals, to make more informed, better decisions, to direct action to optimum possibilities for goal attainment, to model this problem-solving approach to life as a normal way of business in schools both for the benefit of professionals living there and students required to be there -- of these three major thrusts of the League of Professional Schools, shared governance has moved most swiftly into place with action research lagging far behind.

Some of the factors appearing to inhibit ready application of action research in League schools are cited in business and organization (Lippitt et al., 1985): time and methodology - (When do we do it? How do we do it?). Other factors seem to be a negative connotation around use of test results. Possibly because of the history in our state associated with data collection through standardized testing in which tests were selected by "outsiders," data analyzed by "outsiders," and returned to schools as judgments about the work of teachers and principals. "Data collector" was also, early on (late 1970's), the name given to those who assessed beginning teachers with the Georgia Teacher Performance Assessment Instrument. The term research and the methodology and language associated with it has negative connotations for some practitioners (Reys & Yeager, 1974; Hughes, 1982).

New behavior and skills required for collecting and organizing schoolwide data and publicly sharing the results has strained some school social systems and worked to inhibit instead of foster collegiality. It is one thing to ask a teacher to serve as researcher in his/her own classroom and use the experience garnered to improve private practice; it is something else to ask all on-site to marshall their action in support of common goals, regularly monitor progress on these goals, publicly share results, and redirect/modify actions individually, as a grade level unit, or as a school based on assessment of effects.

The following study describes the progress made thus far on increasing the variety, collection, and use of data in the 24 League schools during 1990-1991.

Procedures

This paper is part of a larger effort to assess the progress of the League on its three major goals. The intent is to use the results of these assessments 1) to select the content for future meetings and the nature and types of information, examples, and processes selected for sharing across League schools and 2) to better understand the nature, difficulties, and possibilities of long distance collaboration between schools and universities in service of school improvement.

This study was designed to explore several major questions related to participation in the League: 1) Do schools increase their use of existing data? 2) Do schools begin to look more closely at student achievement data as a determinant of progress on their schoolwide instructional initiatives? 3) Do schools broaden their data collection base beyond standardized tests to provide more accurate/authentic assessment of the effect of their schoolwide instructional initiatives on student learning? 4) Do assessment activities become more focused on what students are experiencing academically and socially during instruction and on what they are experiencing as members of their school's institutional culture?

Sample

The twenty-four schools whose action plans and planning surveys form the units of analysis were members of the League of Professional Schools for 1990-1991. Products developed by school teams as part of their school improvement

plans or as aids to reflection on the planning process provided the bulk of the data analyzed in this study. Action plans were collected in January/February 1990 from 24 schools, in May 1990 from 24 schools, and in February 1991 from 21 schools. Planning surveys were collected from school teams in January/February 1990 and again in February 1991. Data reported here from other sources include results of a survey of changes in assessment practices administered in January 1991 and a summary of what school teams requested as content for future meetings after the October 1990 annual conference and the February 1991 planning meetings.

In their letter of application for membership in the League, these schools signed a commitment to collect data to assess progress on their initiative(s). Acceptance into the League is contingent upon having 80% of the faculty vote by secret ballot to join the League. This application or commitment letter specifies activities League staff agree to provide and activities schools agree to pursue, e.g. shared governance, instructional initiatives, and action research. League schools also agree to share individually their experiences with colleagues and to share collectively the experiences of League schools through presentations and publications.

The six questions used in each of the three sets of action plans, the concerns question and inhibiting / enhancing factors question asked in the two planning surveys, the changes in assessment question asked of the school contact person, and the general discussion question asked of each school team at the end of the October annual conference and the February planning meetings are listed below in Figure 1. School teams composed of a minimum of four persons, which must include the school principal and at least two teachers, completed the action plans together as part of a one or two day meeting of the League of Professional Schools. The action plan is a group product. The planning survey, which includes the concerns question and the question on enhancing / inhibiting factors in school change, is an individual product completed by each school team member. The question used in the survey on changes in assessment practice was mailed to and responded to by the school-designated contact person at each school site. And, finally, the discussion question responses summarized as part of this report are from one of three items listed on the Discussion Questions form used during the final one-half hour of all major meetings. League staff and the League's governing board use the information from these discussion questions in setting priorities and planning future activities.

Figure 1: Data Sources and Context Units Used

League of Professional Schools Instructional Improvement Initiative

1. What is the greatest priority for instructional improvement that the leadership team can act upon this year and continue with over several years?
2. What will be the hoped for results of such an initiative?
3. What specific activities are necessary for carrying out the initiatives? When will they be done?
4. Who will be responsible for which activities?
5. What assistance or resources will be needed?
6. How will progress and results be assessed?*

Planning Survey for League of Professional Schools

1. Name the major instructional changes that have been made in your school in the past three years and describe how they came about.
2. Describe the instructional decision-making process in your school.
3. When you think about school-based leadership, what are you most concerned about? Do not say what you think others are concerned about, but only what concerns you now. Please write in complete sentences, and please be frank.
4. What are enhancing and impeding factors that are important to consider before your school makes further changes?*

Assessment Survey

1. Has your school made any changes in assessment as a result of your participation in the League?

CHECK ONE

_____YES _____NO

If yes, what changes have been made?

League of Professional Schools: Discussion Questions

1. What topics and workshops activities need to be on the program at our Winter Planning Meeting? (Changed to Spring Planning Meeting for February 1991 administration.)*
2. What are your suggestions for our next edition of In Sites?
3. Comments or just anything that you wish to express about services, future meetings, etc.

---

* Indicates items within the context units from which referential units were recorded.

A brief description of the demographics of the schools that comprised the 1990 League and were, therefore, the data sources for this information are provided next as useful background reading prior to the analyses and results. The 1990 Georgia League of Professional Schools had 24 members: 16 elementary schools, 3 middle schools, and 5 high schools. Of these, 2 schools were in urban settings, 16 in suburban, and 6 in rural. For socioeconomic status based on percentage of free and reduced lunches, 11 schools had 10% or fewer students on free and reduced lunch; 3 had 11%-25%; 8 had 26%-50%;and 2 had over 50%. Minority populations ranged from 11 schools with less than lO% minority student enrollment; 5 with 11% - 25%; 5 with 26% - 50%; and 3 with over 50%. In size of population of elementary schools, 1 elementary school had less than 250 students; 5 had between 250 and 500; 5 had between 500 and 800; and 5 had between 800

and 1250. The three middle schools were all in the 900 - 1050 student population range, and the five high schools were from smallest to largest: 390, 680, 900, 1200, and 1850. Regionally, the 1990 League included schools from north, central, and south Georgia; however, the majority representation (14 schools) was suburban schools within a 50 - mile radius of the Atlanta metropolitan area.

Definitions and Methods of Analysis

Definitions. Figure 2 illustrates how schools are asked to use data, and Figure 3 illustrates examples of data sources school teams are encouraged to consider in their planning.(See Figures 2 and 3 on the following page.) The next four paragraphs define terms that were of critical value in analyzing the referential units and answering the four major questions on data use.

Existing data are sources such as attendance figures, retentions, discipline referrals, suspensions, course grades, standardized test scores -- all those "facts" on student and adult life that are readily available for analysis but may not have been organized for use or study.

Student achievement data are criterion referenced and norm referenced test scores, grades, retentions, and promotions. Usually, but not always, these are a subset of existing data sources that identify a student's status in the school's academic program.

Broadening beyond standardized achievement tests refers to any measure of student progress cited in the action plan other than standardized criterion-referenced or norm-referenced test scores.

Assessment focussed on students' academic and social experiences during instruction or on their role as a member of their school culture includes measures that focus on student attitude, academic or social self-concept, transfer of learning beyond the classroom, social skills, physical fitness, sense of efficacy, response to instruction, or role as school community member.

Analyses

Content analysis with results displayed in frequency distributions are used to share the answers to the four questions on data use. Content analysis allows one to make replicable and valid inferences from data to their context. As a research tool it can "provide knowledge, new insights, a representation of (facts,) and a practical guide to action" (Krippendorf, p. 21.) Briefly, for answering the questions in this study, the physical context units were the three sets of action plans and the two sets of planning surveys. The recording unit, using referential units, was any reference--word, phrase, sentence--to data use, or data used, assessment of progress, or evaluation in Item 6 of the action plans and Items 3 and 4 of the planning surveys.

The three sets of school action plans and the two sets of school-team-member planning surveys were read. All references to data use or data used in the items described above were recorded. Then each question became the stimulus for surveying each recording unit for answers to changes in data collection for school improvement. Recorded units may be coded as responses to more than one question. For example, standardized test scores may be coded under Question 1 on existing data; they would also be coded under Question 2 on use of student achievement data. So, while some items in Question 2 could be a subset of Question 1, use of any data sources--existing, conventional, or creative--focused on student achievement was of vital interest and tracked as a separate category.

Planning Survey and Changes Made during the Analysis Phase. Originally,the concerns question was the only item on the Planning Survey for the League of Professional Schools identified for analysis as part of this study. However, after reading all surveys in their entirety, the item on factors which enhance or inhibit change was added because it was in response to this item that approximately one-half of the comments about assessment were expressed. So, in order not to lose this information and to be able to consider it for analysis, these responses became part of the pool from which references to data use were extracted.

The concerns question used was modeled on the standard format for open-ended statements of concern developed by Fuller and her colleagues and used in research on change by Neulove and Hall (Hall & Hord, 1987). According to Hall, George, and Rutherford (cited in Hall & Hord, 1987, p. 59), as respondents consider issues such as school-based leadership, they mentally "explore ways,

means, potential barriers, possible actions, risks, and rewards" in relation to the issue. This "aroused state of personal feelings and thought" about an issue as it is perceived is Concern. Analysis of these responses in relation to assessment provided some information about the level of awareness regarding assessment issues, the level of implementation of data use as a guide to action, and topics or issues for future League meetings or newsletters.

Results

1. Do schools increase their use of existing data?

Table 1

Number of League Schools Citing Use of Existing Data

Dates of Action Plans	Jan/Feb 1990 N=24	May 1990 N=24	Feb 1991 N=21
Schools	8	14	12
Total Citations	14	30	16

In citing existing data for measuring progress and assessing results--such as failure rate, discipline referrals, test scores-- League school teams moved from one third of all schools reporting use of information available in school records, folders, archives, and the like, in January/February 1990 to one-half or more of all schools reporting collection and organization of data from these sources in May

1990 and February 1991. The most commonly cited sources of data were standardized test scores and student failure rates.

2. Do schools begin to look more closely at student achievement data as a determinant of progress on their school improvement initiative?

Table 2

Number of League Schools Citing Use of Student Achievement Data

Dates of Action Plans	Jan/Feb 1990 N=24	May, 1990 N=24	Feb 1991 N=21
Schools	8	13	12

The number of school teams specifically describing measurement of some aspect of student achievement as part of their instructional initiative action plan moved from one-third of the schools reporting to one-half and holding. However, there were no references to disaggregation of data for\by different populations. There was some movement--from zero references in the January/February 1990 plans to four references in May 1990 and four in February 1991--to looking at items such as failure rates both schoolwide and classroom by classroom; comparing changes in failure rates at set times; organizing data from teacher records to look at pre and post reading levels of students after a change in language arts instruction; and team assessment of subject-area grades (A, B, C, D, F) by grade level.

3. Do schools broaden their data collection base beyond standardized tests to provide more accurate\authentic assessment of the effects of their schoolwide instructional initiatives on student learning?

Table 3

Number of Schools Citing Data Used Other than Standardized Tests

Dates of Action Plans	Jan/Feb 1990 N=24	May 1990 N=24	Feb 1991 N=21
Schools	5	7	8
Total Citations	10	22	19

The number of school teams describing collection of information beyond achievement test scores to items such as increased amount of student writing, increase in number of books read, writing portfolios and to existing data such as reading records, tracking of retentions, and analysis of student grades has increased slowly. Few schools have moved into careful scrutiny of instructional or curricular goals and made plans for expanding the accuracy of measuring progress toward these goals, even when the identified priority seemed to demand such an expansion, e.g., as in the following instructional initiatives:

- Broaden participation in and focus on personalized learning in language arts and science.
- Assist students in taking greater responsibility for their behavior and learning.
- Improve student performance by focusing on reading in the content areas for enrichment and enjoyment.

4. Do assessment activities become more focused on what students are experiencing academically and socially during instruction or on what they are experiencing as members of their school's institutional culture?

Table 4

Number of Schools Citing Assessment of Students' Responses or Attitudes to Social, Intellectual\Academic, or Physical Experiences Occurring during School

Dates of Action Plans	Jan/Feb 1990 N=24	May 1990 N=24	Feb 1991 N=21
Schools	5	9	10
Total Citations	5	11	12

The number of schools describing collection of information on what students are experiencing during their days within the confines of the school--beyond academic achievement measures such as grades and test scores or fate control measures such as referrals, suspension, and retentions,-- has increased during this first year. Items cited on the first set of action plans were four student surveys and one reference to tracking amount of student work completed and turned in. While six of the eleven assessment activities cited in the May action plans were "student surveys," five references moved beyond this general description of an assessment instrument to items such as "determine whether there are significantly fewer schedule change requests made after the [new transition / advisement] process has been implemented"; implement follow-up on students who graduate; and in an elaborated description of the content of surveys, such as "administer student questionnaire on the effectiveness of the advisement program."

In the February 1991 action plans, several conventional assessment sources were cited, such as reading interest inventories, home survey of student's reading habits, surveys about the learning process students were experiencing, and self-analysis comparing individual to school/class baseline data (Where am I in this picture?). However, conventional and creative sources--such as student interviews, observations, videotapes of changes in cooperative learning activities, production of artifacts students choose to produce--to gather information were not cited.

Concerns and Impeding Factors

In January/February 1990 and again in February 1991, individual school team members responded to four questions on the Planning Survey for the League of Professional Schools. Along with their responses, team members provided their position in the school. Using questions three and four of the planning survey as the context unit, each of these surveys was read, and all references to evaluation, assessment, data use, or data used were recorded.

For January/February 1990, only four respondents expressed concern directly and clearly related to assessment of the goals or actions implemented by the school community. Four other respondents cited concerns or inhibiting factors possibly related to assessment. For example, directly related responses were:

Elem. Techr. (I) Will these common goals be evaluated?

Asst. Prin. (C) I am concerned about allowing teachers not only to voice opinions, but to plan, implement, and evaluate some of the strategies they feel work.

Asst. Prin. (C) Do we use research from the field and data gathered on our students?

Prin. (C) Keeping people motivated to continue to assess what they are doing and why.

The four statements that expressed a peripheral relationship to action research or assessment of progress were:

Asst. Prin. (C) I am very troubled about emphasis on standardized test scores. It seems that we try to teach the test to get high scores to 'beat' their school's systems. Our teachers complain about lack of freedom because of GTOI [Georgia Teacher Observation Instrument] and test score emphasis.

8th Grade Teacher (C) Also, each class is 'doing its own thing' and I worry about measuring up or my kids not getting what they need for testing or for preparation next year.

Principal (I) Impeding factor - evaluating where we are at this point in this shared leadership. Evaluating what direction the parents want the school to go.

6th Grade Teacher (I) Need to consider . . . effect on students (what's best for them).

In the February 1991 surveys, twenty-three respondents identified specific concerns about assessing the effect of their initiative or about using data to measure the effects of changes on students. The dominant pattern in these responses (16 of the 23) was concern about the need to assess progress on the school improvement initiative. Examples of responses follow:

Elem. Teacher (C) Evaluation also concerns me -- we must be able to show ourselves and others that our work was worthwhile.

3rd Grade Teacher (C) I am concerned with the assessment of whole language lessons and interdisciplinary unit teaching.

Elem. Teach. (C) I would like to work more on gathering data to evaluate progress.

4th Grade Teacher (I) Need data collected on the good things we've done.

Instructional (I) Additional action research needs to take place and data

Lead Teacher	gathered to see where we are with our instructional initiatives.
3rd Grade Teacher	(I) We are working on evaluation ideas. We need to know if what we are doing is best for children.
5th Grade Teacher	(C) We are still grappling with the idea of what data do we need to look at and how do we need to look at it.
Central Off.	(C) It will be difficult to make the time to complete all the items needed - - especially action research. Some teachers may not be willing to take responsibility for solving concerns that arise during action research.

Major differences between the two samples were the increases from 1990 to 1991 in number of respondents expressing concern or awareness of the need to collect and use data to assess progress on their initiative (January/February 1990 - 8 of 123 respondents,7%; February 1991 - 23 of 104, 22%). Responses had a tighter link semantically between actions being taken or implemented and use of data to determine the effectiveness of these actions. For example:

Elem. Teacher	(I) We need to monitor and evaluate our current changes.
Principal	(I) We need . . . to decide on useful ways to assess what we are doing.
2nd Grade Teacher	(I) We have our goals set and have even made plans and implemented some. What we need to do is assess our progress.
4th Grade Teacher	(C) I'm also concerned about how implementation of the different focuses are monitored after the PSI Team has approved a particular idea brought before it by a task force.

Another major difference between the 1990 and 1991 planning survey responses had to do with the positions or roles of respondents citing concerns about assessment of progress. In the January/February 1990 data, only three of the eight respondents were teachers; the other five respondents were principals and

assistant principals. Teachers were under-represented by role in their number of responses: in the total group, 81(66%) of the 123 respondents were teachers and 42(34%) were principals, assistant principals, and central office supervisors. In the February 1991 data, 17 of the 23 respondents were classroom teachers; this representation was more proportionate to their role representation in the total population of respondents. The percentage of classroom teachers expressing concerns about assessment of progress moved from 4% of the total set of respondents in 1990 to 23% of the total set of respondents in 1991.

Responses to the Changes in Assessment Question

Eight of the twenty-four League school contact persons responded "Yes," our school has made changes in assessment as a result of participating in the League of Professional Schools. In their description of changes, four of them cited administering student attitude or self-esteem surveys, two cited school climate surveys, and two cited parent surveys. One contact person described "rudimentary first steps" as changes made, for example:

> We have begun to get some more teachers' attention about assessment and how important it is. We have begun some dialogue about how we assess students in our classrooms and what kinds of information teachers need to collect to be able to assess a student's performance.

Two contact persons also described securing informal assessments such as feedback from their School Improvement Team, from grade level planning meetings, and from their across-the-grade-planning meetings. One contact person described a more thorough analysis of results from the Georgia Criterion Referenced Tests in reading, writing, and mathematics and from the state-required Iowa Tests of Basis Skills.

Responses to Discussion Questions

The number of school team requests for future workshop sessions and activities on assessment increased each time this discussion question was asked: "What topics and workshop activities need to be on the program at our [next] meeting?" The sharpest increase was from the October 1990 meeting to the February 1991 meeting.

Assessment or action research began as a low-interest topic but gradually became a prominent concern among League schools. At the end of the October meeting, eight school teams requested additional assistance and activities focused on the action research process, on case study examples of assessment, and on assistance in developing assessment plans. At the conclusion of the February 1991 meeting, fifteen school teams requested additional activities on action research. Specific items mentioned were to continue the progression of sessions on this topic, to continue providing examples and group work-time on assessment, to continue the sharing from school teams on what had been done in those schools fartherest along in the action research process, and to provide more concrete assistance on developing assessment plans. In terms of assessment plans, teams asked for help in determining who should collect data, when it should be collected, how or what instruments to use, how to design effective data gathering instruments, and where to find good computer programs to use for organizing data.

League Activities to Promote Action Research

What was done to help these 1990 League schools collect and use data for school improvement? Here is a brief chronological outline of key activities:

January/February 1991

As part of the two-day orientation and planning workshop prior to their affiliation with the League, school teams were provided with a brief (15 min) overview of action research. After the overview, team members were asked to 1) individually answer, 2) discuss as a group, and 3) come up with a team response to three questions on sources of information used to assess the effects of instructional programs on students.

These three questions were:

(1) What data do we use?
(2) What other data-- available and/or must be sought-- could we use?
(3) What information would help us set schoolwide instructional goals?

January/February 1990

The last two hours of the orientation and planning meeting had school teams developing their action plans. These plans include a section on assessment of progress. During this workshop planning time, four to six League staff members were available on request to provide immediate planning assistance.

March 1990 - March 1991

Telephone consultation was available with League staff about data collection, instrumentation, organization of data, analysis of results, and general trouble-shooting.

May 1990

At the first Spring Planning Meeting, participants could attend a 55 minute session on assessing progress. Each school team was encouraged to send at least one representative to this breakout session. Participants were provided with two resources to support their data collection efforts:

1. Smorgasbord for Baseline Data\Evidence of Progression on Instructional Initiatives. This eleven page packet listed over a hundred data collection activities generated by League staff after they had studied the action plans written by the 24 League schools. Samples of potential activities included existing data sources such as retention rate/ promotion rate by school, by grade level, by teacher, and by particular groups (male/female, black/ white, high/mid/low SES) and the percentage of students participating in school-sponsored organizations like DECA, FBLA, Student Council, Yearbook Club, Drama Club by school, grade level, ethnic group, academic track, etc. Conventional data sources such as number of books read by students recorded individually, by classroom, by grade level, and by school; library use by function and by number of books checked out, by grade level, by school; writing samples; student attitude surveys in the content areas followed-up with interviews; nature of assistance, numbers of, and/or amount of time contributed by volunteer parents or community members. More creative sources recommended as possibilities included videotapes of students working in cooperative groups, in-depth case studies on a sample of students, student evaluation of instructional materials used, and portfolios of student work.

2. Action Research Notebook. In addition to this listing of possibilities, each school was provided with an Action Research Notebook that included descriptions of, scoring guides for, and in many cases actual copies of 23 instruments. League staff had secured prior permission for schools to copy many of these instruments; when copying was not permitted, ordering information was included. The four sections under which these instruments were grouped follow: (A) Questionnaires and Surveys - Attitude (for students and teachers); (B) Innovation Concerns (for school staff); Locus of Control\Conceptual Level; and (D) School Climate.

The May session concluded with a brief application activity. Participants were urged to consider these materials and suggestions later in the day when they would be working with their school team members on their school's action plan.

October 1990

At the annual conference, participants were provided with another 45 minute session on assessing instructional initiatives. This session had three parts: lessons from the field, assessing implementation results, and sharing from schools. During lessons from the field, League staff provided tips for getting started with data collection, for selecting methods and instruments, for reporting results, and for making adjustments. In assessing implementation and results, considerations in and examples of assessing implementation were discussed, including levels of use and appropriateness of use. Assessment of utilization of components of the school program--curriculum development activities, staff development activities, evaluation activities, and administrative procedures--to support implementation was also discussed. Two other points presented and emphasized through examples were the need to assess the effects of major initiatives on all stakeholders--students, teachers, administrators, parents, community--and the value of using multiple data sources to provide information. The emphasis was on going beyond standardized test scores to student products, student performance, observations of desired actions, and simply counting incidences of the behavior under study. As in the May session on assessing progress, school teams were encouraged to count behaviors and products relevant to their initiative and organize their data into simple frequency distribution tables. For example, depending on the goal(s) of the action plan, school faculty could count items such as discipline referrals, number of books read, number of and amount of time contributed by volunteer parents or community members, number of simulations each teacher had tried as part of the new social studies curriculum.

During school sharing time, participants were asked what was needed next to support their action research efforts. The primary responses were 1) start over with concrete steps on how to get started; 2) let's hear from some schools that have made progress on action research; and 3)provide longer sessions with more work time on this topic. A comment from one of the principal's attending this session seemed to summarize the majority feeling succinctly: "We are just beginning to understand why we need to do some of the assessment things you were talking about last spring [May 1990]. Start over and go step-by-step."

Two other 55 minute sessions on methodology or sources of data were offered as part of the annual conference. One was on observation of student work, and the other was on interview techniques for use with\by staff, students, or community members. The emphasis in each of these breakout sessions was on using these techniques to enhance understanding of what individuals were experiencing and to assess progress on school improvement initiatives.

February 1991

The Winter Planning Meeting breakout session on assessing progress was a two and one-quarter hour session. For an hour and a quarter, three League schools whose action plans and conversations had indicated they were collecting data relevant to their instructional initiatives presented. School team members shared what had been done at their schools, provided copies of results illustrating how they had organized their data, and provided brief written overviews of their action research efforts. The elementary school presenters focused on how they had involved teachers schoolwide in thinking about assessment, and the middle school and high school presenters focused on their collection of baseline data. Session participants questioned presenters about how and should classroom-level (teacher-level) data be shared schoolwide, such as number of students failing English 11A, and what actions were being taken to achieve the goal(s) of each school's initiative.

The final hour of the session inluded a discussion of Figures 2 and 3 as operational schema to use in planning and conducting action research. While the same content had been delivered in earlier presentations, materials, and handouts, these two figures had just been developed to use with the 1991 potential League schools during the January orientation and planning workshops. Based on League schools' progress in this area, staff were searching for a clear, accurate conceptual representation of the action research cycle and of the broadening of data sources

emphasis as a framework to share with new schools during the initial presentation of this topic. Session participants were asked to use the two figures for self-evaluation of their school's action research efforts.

Examples of data handling, both oral and written, were provided for each step of the action research cycle: collection, organization, analysis, interpretation, and action. (See Figure 2.) Examples or descriptions of collection and\or use of existing, conventional, and creative sources were provided also. (See Figure 3.) The final 20 minutes of the session was used for an application activity. Each school team member was asked to consider his\her schoolwide initiative and write a list of assessment activity recommendations to take back to the full planning team session after lunch.

February\March\April 1991

Schools received one full-day on-site visit by a League staff member. The primary intent of this visit was 1) to provide school teams with a status report on their shared governance process, and 2) to provide League staff an opportunity to study variations of shared governance in use by different faculties in 24 school sites. During this visit, one-half of the day (3 1\2 to 4 1\2 hours) was spent interviewing staff members-- both those on the school governance leadership team and those who were not-- students, and the school principal. Any materials developed by the school staff related to the three League emphases (shared governance, enhanced education through instruction, action research) were collected, reviewed, and placed in the school file. During the second half of the day, League staff fulfilled school requests for service such as assisting school teams by participating in trouble-shooting sessions; facilitating planning meetings; conducting staff development sessions in content areas; presenting shared governance or action research overviews during school faculty meetings; etc.

Within two weeks of the on-site visit, the school contact person is mailed a status report that addresses shared governance in X School; and, depending on the on-site facilitator, this report may include sections on the school's instructional initiative and on action research at X School.

Reflections on Action Research in the League

Within the League of Professional Schools, shared governance developed more rapidly than did the action research component. This was true of all sites.

At this point nearly all sites have colleagial discussions about school improvement; most have plans that guide action; but none has a well-developed action research process.

However, many of the sites appear, after a year of involvement, to be eager to study action research and how to conduct it. Also, what appeared at first to be reluctance to engage in action research in some sites appears now to have diminished. When implementing a complex process such as using action research to guide collective action for school improvement, school faculties may need a year of activities, examples, and discussion to develop readiness for implementation.

Until we have further experience with the efforts of League members, it will be difficult to project patterns of need for support or exactly how to provide sufficient technical support for action research through our school-university collaborative framework. However, based on this year's experience with twenty-four widely-different schools, many school teams appeared to need to learn about the kinds of assessment devices that are available and how they can be used. Early formulations of assessment goals were either too general to be acted on (use of surveys sui generis, rather than specific surveys) or seemed to identify common instruments such as standardized tests more or less "because they were there" than because they fit the need or could provide information in the time frame needed for problem solving. Very few sites have become, at this point, oriented toward the use of some of the assessment sources that are readily available on-site-- such as grades, promotions, referrals, disciplinary actions, or student opinion about problems and successes. After another year's experience conducting action research on the League as a support unit for school improvement and studying the efforts of League schools, we may know more about the developmental aspects of action research for school improvement.

A Personal Note

Although I prefer in general to stay close to the ground of the data, I would like to share a few personal observations or impressions which I cannot assert with the same sense of data-groundedness that I can that elements of shared governance appeared more quickly in our League schools than did the process of action research for school improvement.

However, ... it appears to me:

That the public sharing of data has a confrontational connotation to some of our teachers and administrators. Some sites have reported that problem-identification linked to specific personnel is very uncomfortable and difficult for them to handle productively. (The number of kids failing algebra is five times those failing calculus. One school team is responsible for forty percent of our failures schoolwide.)

Some types of confrontation can be beneficial, however, as I observed occasionally. One faculty was shocked when they counted the number of children who were failing the ninth grade and the number who had traditionally dropped out. Recovering from the shock, they responded by taking action. I observed other faculties where the same type of pattern occurred--data collection, shock at the evidence, and (not without struggle) redirection of their initiatives.

I think that it may be necessary for schools to experience this kind of confrontation if school improvement is to become serious. Schaefer's vision of the school as a center of inquiry--still one of the best statements of collective action by empowered professionals--requires that faculties become realistic in describing current conditions, scholarly in postulating courses of action, and realistic again in assessing the consequences. All of these require the ability to deal with information that confronts our assumptions. And in our society, confrontation, whether social or intellectual, is no trivial matter. The "research" dimension of action research requires that we learn to seek data that will challenge as well as confirm, that we set courses of action not as sure solutions but as the best we know at this time, and that we understand that confrontation with data about how well our idea worked is, seen properly, self-enhancing and a spur to the next phase of action.

FIGURE 2

Action Research: Data Use

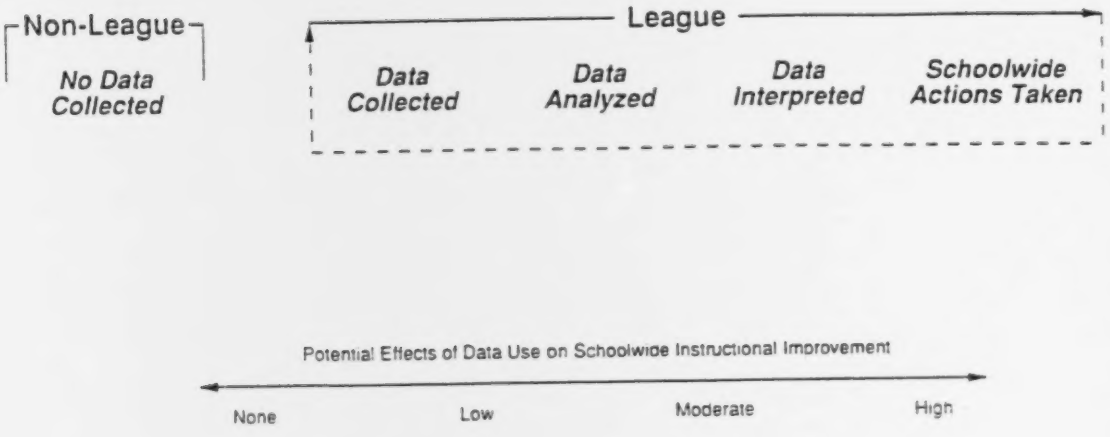
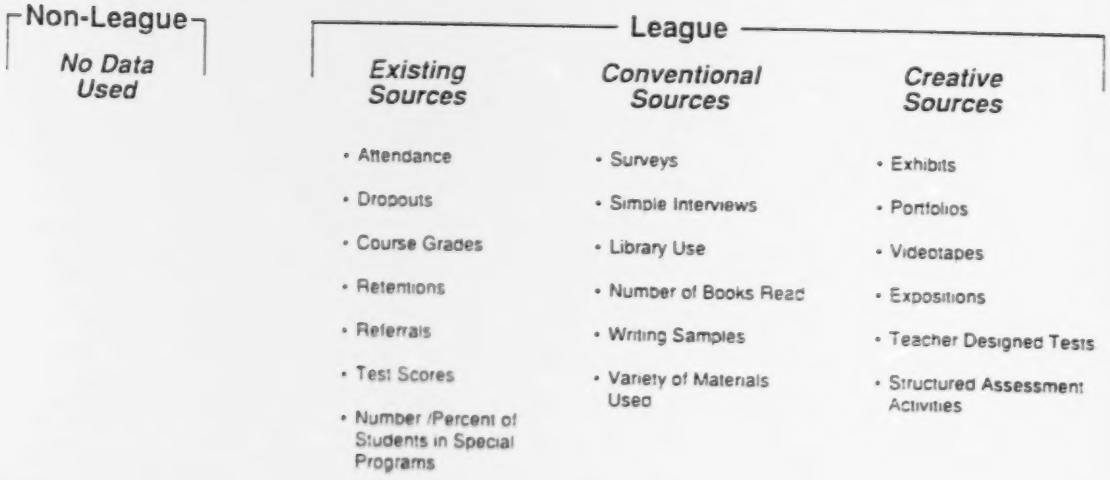


FIGURE 3

Action Research: Data Used



References

Corey, S.M. (1953). Action research to improve school practices. New York: Teachers College Press.

Dewey, J. (1904/1965). The relationship of theory to practice in education. In M.L. Borrowman (Ed.), Teacher Education in America: A Documentary History. New York: Teachers College Press.

Gardner, J.W. (1963). Self-renewal. New York: Harper and Row.

Goodlad, J.I. (1984). A place called school. New York: McGraw-Hill.

Glickman, C.D. (1990). Supervision of instruction: A developmental approach. Boston: Allyn Bacon.

Hall, G.E., & Hord, S.M. (1987). Change in schools: Facilitating the process. New York: State University of New York.

Houle, C.O. (1980). Continuing learning in the professions. San Francisco: Jossey Bass.

Hughes, R.G. (1982). Results of a survey in 10 south Georgia counties: Why classroom teachers and administrators do not use more research findings in the classroom and office. Paper presented at the seventh annual meeting of the Georgia Educational Research Association, Atlanta.

Krippendorff, K. (1980). Content analysis: An introduction to its methodology. Beverly Hills: Sage Publications.

Lewin, K. (1947). Group decisions and social change. In T.M. Newcomb and E.L. Hartley (Eds.), Readings in Social Psychology. New York: Henry Holt.

Lewin, K. (1948). Resolving social conflicts: Selected papers on group dynamics. New York: Harper and Row.

Lippitt, G.L., Langseth, P., & Mossop, J. (1985). Implementing organizational change. San Francisco: Jossey Bass.

Reys, R.E., & Yeager, T. (1974). Elementary teachers and research in mathematics education. School Science and Mathematics, 74, 431-436.

Schaefer. R.J. (1967). The school as a center of inquiry. New York: Harper and Row.

Schon, D.A. (1987). Educating the reflective practitioner. San Francisco: Jossey Bass.

Sirotnik, K.A. (1987). Evaluation in the ecology of schooling. In J.I. Goodlad (Ed.), The ecology of school renewal: The eighty-sixth yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press.

Toffler, A. (1990). Powershift. New York: Bantam Books.

Weick, K. E. (19xxxxx) The social psychology of organizing. Reading, Mass: Addison-Wesley.